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Lesbian, Gay, Bisexual, and Transgender Adolescent School Victimization: Implications for Young Adult Health and Adjustment

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ABSTRACT

BACKGROUND: Adolescent school victimization due to lesbian, gay, bisexual, or transgender (LGBT) status is commonplace, and is associated with compromised health and adjustment. Few studies have examined the long-term implications of LGBT school victimization for young adult adjustment. We examine the association between reports of LGBT school victimization and young adult psychosocial health and risk behavior.

METHODS: The young adult survey from the Family Acceptance Project included 245 LGBT young adults between the ages of 21 and 25 years, with an equal proportion of Latino and non-Latino White respondents. A 10-item retrospective scale assessed school victimization due to actual or perceived LGBT identity between the ages of 13 and 19 years. Multiple regression was used to test the association between LGBT school victimization and young adult depression, suicidal ideation, life satisfaction, self-esteem, and social integration, while controlling for background characteristics. Logistic regression was used to examine young adult suicide attempts, clinical levels of depression, heavy drinking and substance use problems, sexually transmitted disease (STD) diagnoses, and self-reported HIV risk.

RESULTS: Lesbian, gay, bisexual, and transgender-related school victimization is strongly linked to young adult mental health and risk for STDs and HIV; there is no strong association with substance use or abuse. Elevated levels of depression and suicidal ideation among males can be explained by their high rates of LGBT school victimization.

CONCLUSIONS: Reducing LGBT-related school victimization will likely result in significant long-term health gains and will reduce health disparities for LGBT people. Reducing the dramatic disparities for LGBT youth should be educational and public health priorities.

Keywords: LGBT; sexual orientation; victimization; mental health; HIV; STDs; risk behavior; young adulthood; adolescents.

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The victimization of lesbian, gay, bisexual, and transgender (LGBT) students in middle and high schools is pervasive. Such victimization ranges from social interactions in which homophobic discourse is a routine part of everyday communication (eg, the use of ''that's so gay'' and ''fag'' as generalized derogatory comments among teens)[1,2] to verbal harassment[3,4] and physical violence.[5,6] In the last decade, a growing body of research documents the prevalence of LGBT victimization in US secondary schools.[7,8] More recently, results of a survey of LGBT youth from across the country[9] indicate that 90% of students reported hearing the word ''gay'' used in a derogatory way, and over 85% reported that they were verbally harassed because of their sexual orientation. Furthermore, 44% said that they were physically harassed because of their sexual orientation. What are the long-term implications of such victimization?

Prior research has identified strong associations between secondary school victimization (whether

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motivated by LGBT-related bias or not) and compromised health and adjustment during adolescence.[10] School victimization has been linked to compromised academic achievement and school absenteeism, aggressive behavior, compromised emotional health, and suicidal ideation.[11] In addition, physical victimization is linked to substance use, delinquency, and aggression, particularly for boys.[12] One recent study showed that adolescents who described their health as fair or poor were more likely to have also reported that they missed school because they felt unsafe; this effect was particularly pronounced for boys.[13]

One school-based study showed that the combination of LGB identity and school victimization predicted high levels of health risk behavior during adolescence. Using data from Massachusetts and Vermont *Youth Risk Behavior Surveys*, the study showed that at low levels of victimization, students that identified as LGB were similar to heterosexual students in health risk behavior.[5] However, at high levels of school victimization for both groups, LGB students reported more substance use, suicidality, and sexual risk behaviors. The authors suggest that the victimization experienced by LGB youth may have been attributable to their sexual minority status.

In fact, a growing body of research has shown that much of the victimization or bullying that takes place in schools is motivated by bias or prejudice. Furthermore, the negative consequences of bullying appear to be worse when bullying is motivated by bias or prejudice. A recent study found that high school boys who were bullied by being called gay had greater psychological distress and more negative attitudes about the school climate compared with boys who were bullied for other reasons.[4] Similarly, in a representative study of over 200,000 California 7th, 9th, and 11th grade students, the rates of compromised school grades and attendance, depression, and substance use were higher for students who had been bullied at school because of their race or ''because you are gay or lesbian or someone thought you were'' than for students who did not experience bias-related victimization. Both groups reported higher health risks than those who were not bullied at all.[8] Finally, another study directly compared LGB and heterosexual students' experiences of homophobic teasing.[3] The results showed that health risks were lowest for students who reported no teasing, but among those who experienced homophobic teasing, LGB and youth who were questioning their sexual orientation reported the highest levels of depression, suicidal feelings, and alcohol or marijuana use.

All of the research described thus far has considered school victimization and concurrent adjustment for adolescents. However, research on non-bias-related victimization and bullying shows consistent and strong links between victimization and later psychosocial adjustment for children and adolescents.[14] For example, an Australian cohort study showed that having a history of victimization predicted emotional problems in adolescence; specifically victimization at age 13 was linked to depression and anxiety a year later.[15] There have been only a small number of studies of the lasting influence of school victimization for health and well-being in the years after formal schooling and into young adulthood. A longitudinal study in Finland showed that having been a victim of bullying by age 8 was linked with anxiety 10-15 years later, when the study participants were young adults.[16]

Two retrospective studies conducted in the United Kingdom have examined the long-term consequences of LGB victimization for LGB adults. One compared LGB men and women in their late 20s who reported having been bullied at school with those who had not; results showed higher depressive symptoms (but not anxiety) among those who reported school bullying.[17] In a second study, also of LGB men and women in their late 20s, symptoms of posttraumatic stress were stronger among the subgroup that reported a longer duration (in years) of homophobic bullying at school.[18] Together these studies suggest that LGB school victimization, like non-bias-related victimization, has a negative effect on mental health that lasts into adulthood.

Taken as a whole, the prior research suggests that school-related victimization in middle and high schools has negative consequences, and that bias-motivated victimization, in particular, may compromise mental health. Moreover, at least a few studies show negative consequences for academic achievement and other health risks such as substance use. There are no known studies in the United States that examine the influence of LGB school victimization in middle and high schools for a range of mental and behavioral health outcomes in young adulthood: this study examines LGBT victimization in middle and high school and its influence on young adult social, emotional, and behavioral adjustment and health. Given the known health disparities faced by LGBT young people, evidence of lasting consequences of

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middle and high school victimization into young adulthood is particularly important for schools because it underscores the need to prevent and intervene in LGBT victimization.

METHODS

Subjects

The Family Acceptance Project is a network of research studies, intervention development, and policy activities aimed at increasing family acceptance and societal support for LGBT youth and young adults. Additional information about the Family Acceptance Project is available at the project's Web site (http://familyproject.sfsu.edu). The young adult survey included a convenience sample of 245 California-based LGBT young adults between the ages of 21 and 25 years (mean = 22.8, SD = 1.4). Among the young adults in the study, 46.5% identified as male, 44.9% as female, and 8.6% as transgender. This study was designed to include an equal number of Latino (51.4%) and White, non-Latino (46.8%) young adults.

Procedure

In 2005, participants were recruited from 249 LGBT venues, mapped for patronage by this population from among general social and community organizations as well as LGBT bars and clubs, within a 100-mile radius of the San Francisco Bay Area. Half of the sites were community, social, and recreational agencies and organizations that serve LGBT young adults, and half were from clubs and bars serving this group. Bilingual recruiters (English and Spanish) conducted venue-based recruitment from bars and clubs and contacted program directors at each agency to access all young adults who use their services. Using street-based outreach outside the venues to maximize representation and minimize bias, young adults were screened for eligibility through inclusion criteria that included age (21-25 years), ethnicity (White, Latino/a, or Latino/a mixed), self-identification as LGBT, homosexual, or related LGBT identity (eg, queer) during adolescence, disclosure about sexual orientation to at least 1 parent or guardian during adolescence, and at least part-time residence with at least 1 parent or guardian during adolescence. Participants were recruited in California; however, we do not know whether they attended middle and high school in California or in some other location. Of the individuals recruited for the study, 723 agreed to be screened for inclusion and 438 met the inclusion criteria; of those, 245 individuals participated in the study. The survey was made available to participants in English or Spanish, as well as in paper and pencil and computer-assisted formats. The survey took, on average, 1.5 hours to complete (duration ranged from 30 minutes to 4 hours). Participants received a $50 stipend for their participation.

Instruments

Adolescent School Victimization Due to Actual or Perceived LGBT Status. A 10-item retrospective scale assessed school victimization due to actual or perceived LGBT status between the ages of 13 and 19 years. This scale was adapted from the California Healthy Kids Survey measure on violence, safety, harassment, and bullying.[19] Sample items included ''During my middle or high school years, while at school, I was pushed, shoved, slapped, hit, or kicked by someone who wasn't just kidding around'' and ''During my middle or high school years, while at school, I had mean rumors or lies spread about me.'' These statements were followed by the question: ''How often did this occur because people knew or assumed you were LGBT?'' (0 = never, 3 = many times; mean = 7.59, SD = 7.75). The scale had excellent internal reliability ($\alpha = .91$). Participants were also asked whether victimization occurred due to reasons other than perceived or actual LGBT identity, such as race or weight; this strategy minimizes the possibility that the reported school victimization was attributable to other forms of bias. Levels of LGBT school victimization were trichotomized to compare levels of victimization: low (n = 91, range = 0-2, mean = 0.45, SD = 0.76), moderate (n = 75, range = 3-10, mean = 5.91, SD = 2.35), and high (n = 79, range = 11-28, mean = 17.41, SD = 4.73). Descriptive information revealed that the school victimization items were significantly skewed; square root transformation returned the variables into acceptable range (mean = 5.33, SD = 4.91).

Young Adult Depression. The 20-item version of the Center for Epidemiologic Studies-Depression Scale (CES-D)[20,21] was used to measure levels of depression in young adulthood. Consistent with prior studies, the measure had strong internal reliability ($\alpha = .94$). Prior to analyses, descriptive information revealed significant skewness in depression items; square root transformations returned the variables to acceptable ranges (mean = 12.41, SD = 8.24). For purposes of identifying respondents with clinical levels of depression (ie, scores at or above the accepted cutoff score [$\geq$16]), a dichotomous variable was created from the untransformed sum of depression items (0 = score less than 16 and 1 = score greater than or equal to16 [44%]).

Young Adult Suicidal Ideation and Behavior. One item measured suicidal ideation in young adulthood: ''During the past 6 months, did you have any thoughts of ending your life. If yes, how often?'' (0 = never, 1 = once, 2 = a few times, and 3 = many times). This item had significant skewness levels; however,

a square root transformation shifted the variable into acceptable range (mean = 0.35, SD = 0.60). Suicide attempts were measured by 1 item: ''Have you ever, at any point in your life, attempted taking your own life?'' (0 = no and 1 = yes [41%]). In addition, we include a measure of serious attempts that required medical attention: ''Of these times, how many were serious enough to need medical attention?'' (0 = legitimate skip or none and 1 = one or more times [22%]).

Young Adult Adjustment. Life satisfaction was measured by an 8-item scale. Sample items included ''At the present time, how satisfied are you with your living situation?'' and ''At the present time, how satisfied are you with your friendships?'' (1 = very dissatisfied and 4 = very satisfied; mean = 22.78, SD = 4.19; $\alpha = .75$). The 10-item Rosenberg Self-Esteem Scale[22] was used and had strong internal reliability in this sample ($\alpha = .88$; mean = 2.80, SD = 0.38). The measure for social integration was based on the mean of 4 items: ''How often do you feel you lack companionship?'' ''How often do you feel there is no one you can turn to?'' ''How often do you feel alone?'' and ''How often do you feel left out?'' (0 = never and 3 = always). These items were reverse coded, such that a higher score indicates greater social integration. The scale had good internal reliability ($\alpha = .85$; mean = 2.07, SD = 0.65).

Substance Use and Abuse. Two measures assessed heavy drinking and problems due to substance use or abuse. Participants were asked the following 2 questions to obtain information about heavy drinking behavior: ''During the past 6 months, how often have you had any alcoholic beverages (such as beer, wine, liquor, or other drink)?'' (0 = never and 6 = at least one a day) and ''During the past 6 months, on a typical day when you drank some alcohol, how many drinks did you usually have (by 'drink' we mean a glass of wine, a can or bottle of beer, or a drink with a shot of hard liquor)?'' (response was open-ended). Participants who reported consuming alcoholic beverages 1-2 times a week or more and who reported having 3 or more drinks on a typical day were categorized as heavy drinkers (n = 100, 41%). Problems due to substance use and abuse were measured by 4 items: ''In the past 5 years, have you had problems with the law because of your alcohol or drug use?'' ''In the past 5 years, have you lost a job because of your alcohol or drug use?'' ''In the past 5 years, have you passed out or lost consciousness because of your alcohol or drug use?'' and ''In the past 5 years, have you had conflicts with family, lovers, or friends because of your alcohol or drug use?'' (0 = no and 1 = somewhat yes/yes). A summary variable was created as an indicator of problems due to alcohol or drug use (0 = never and 1 = any [56%]).

Sexual Risk. Sexual risk was assessed with 2 measures. First, participants were asked if they had ever been diagnosed with a sexually transmitted disease (STD). Of the respondents, 27% (n = 65) had been diagnosed with an STD. Second, participants were asked about their risk for HIV infection over the past 6 months: ''In the last 6 months, were you ever at risk of being infected with or transmitting HIV?'' (0 = no and 1 = yes [30%]).

Sociodemographic Characteristics. Information on 5 sociodemographic characteristics was collected, including gender (female, with male as the reference group), transgender (with non-transgender as reference group), sexual orientation (dichotomous variables for bisexual and queer, with gay or lesbian orientation as the reference group), immigrant status (0 = not immigrant and 1 = immigrant), ethnicity (White, non-Latino, with Latino/Mixed as the reference group), and family-of-origin socioeconomic status (SES). SES was measured by open-ended responses to the following question: ''What kind of work did your parents/caregivers do during your teenage years?'' Each participant was asked to report on their father's and mother's type of work. Participant responses were coded by 3 independent raters (1 = unskilled, 2 = semiskilled, 3 = skilled, and 4 = professional). A single indicator of SES was calculated by multiplying responses for both parents' work (1 = unskilled to 16 = professional; mean = 6.75, SD = 4.77).

Data Analysis

To maximize power and sample size, we used the expectation maximization algorithm in PRELIS, a component of LISREL 8.80, to impute missing data (total < 5%).[23] Analysis of covariance was used to examine group differences between victimization levels and experience of long-term health risk outcomes. Multiple regression analyses were used to examine the effect of LGBT school victimization on young adult outcomes while controlling for sociodemographic characteristics; logistic regression was used for dichotomous outcomes.

RESULTS

There were no statistically significant differences in LGBT school victimization based on ethnicity, immigrant status, or SES. However, between-group analysis of variance comparisons revealed that females reported less LGBT victimization when compared with males and transgender young adults, both male-to-female and female-to-male ($F_{(2,224)} = 18.73$, $p < .001$). Additionally, participants who identified as queer reported more LGBT-related victimization when compared with gay, lesbian, and bisexual participants ($F_{(2,224)} = 8.33$, $p < .001$).

Analyses that predict young adult mental health and social adjustment show the strong predictive

role of adolescent LGBT school victimization. Table 1 presents regression analyses in which background characteristics are presented alone in model 1; model 2 includes LGBT school victimization. Females generally reported lower negative mental health and higher positive adjustment when compared with males. Depression was higher and self-esteem was lower for immigrants and persons from low SES families. Family SES was also associated with life satisfaction and self-esteem. Non-Latino Whites reported lower self-esteem when compared with Latinos.

Females had lower depression (model 1) until LGBT victimization was taken into account (model 2): LGBT school victimization accounts for the strong difference between males and females in overall levels of young adulthood depression. A Sobel's test indicated that LGBT victimization fully mediated the association between gender and young adult depression ($z = -3.21$, $p < .01$). A similar pattern is seen for suicidal ideation; specifically, males have higher scores on average, but this difference is explained by males' higher rates of LGBT school victimization, which is strongly linked to young adult suicidal ideation. Again, a Sobel's test indicated that LGBT victimization fully mediated this prior association ($z = -3.19$, $p < .001$). In summary, LGBT school victimization mediates the strong link between gender and negative mental health. Lesbian, gay, bisexual, and transgender school victimization is also strongly linked to positive mental health and adjustment outcomes (lower self-esteem, life satisfaction, and social integration), but it does not fully account for gender differences; in general, females score higher on all 3 positive young adult adjustment measures.

Analyses of dichotomous mental health, substance use, and sexual risk behavior are presented in Table 2. We present the odds ratios for the 3-category LGBT school victimization variable—moderate and high victimization compared with low victimization—for each outcome. There was no statistical association between LGBT school victimization and heavy drinking or substance use-related problems in young adult. Furthermore, there were few statistically strong differences for those who reported moderate levels of LGBT school victimization compared with those who reported low levels. However, there were several strong differences between the groups that reported high vs low LGBT school victimization. Specifically, LGBT young adults who reported high victimization during adolescence were 2.6 times more likely to report depression above the clinical cutoff (CES-D $\geq$ 16), and 5.6 times more likely to report having attempted suicide at least once, and having a suicide attempt that required medical attention. Compared with those with low LGBT school victimization, respondents who reported high levels were more than twice as likely to report having had an STD diagnosis and to have been at risk for HIV infection. These dramatic differences are illustrated in Figure 1. Compared with moderate and low levels of LGBT victimization, almost twice as many young adults who reported high levels of LGBT school victimization reported clinical levels of depression and an STD diagnosis. One quarter of the participants at low levels of LGBT school victimization reported ever attempting suicide, compared with one third of those at moderate levels of victimization and two thirds at high levels of victimization. Finally, more than half of those who experienced high levels of LGBT school victimization reported HIV risk as young adults—a rate that was more than double the rate of those who reported low levels of victimization.

DISCUSSION

School bullying is a widespread public health problem. School victimization of LGBT students and those who are perceived to be gay or gender nonconforming has been reported for decades. Experts report that it appears to be increasing in prevalence and severity, and involves more vicious behaviors and deadlier outcomes than in previous years.[24] When

Table 1. **The Association Between Victimization and Young Adult Adjustment, Controlling for Background Characteristics (Ordinary Least Squares Multiple Regression, Standardized Estimates Shown)**

Outcome	Depression		Suicidal Ideation		Life Satisfaction		Self-Esteem		Social Integration	
Predictors	1	2	1	2	1	2	1	2	1	2
Female	−.16*	−.07	−.14*	−.05	.23***	.17*	.19**	.13+	.26***	.21**
Transgender	.07	.07	.02	.01	−.11	−.10	.06	.07	−.03	−.03
Bisexual	−.11+	−.09	.02	.04	.07	.06	−.07	−.08	.03	.01
Queer	−.002	−.05	.02	−.03	.01	.05	−.06	−.03	.02	.05
White	.09	.07	.08	.05	−.01	.01	−.15*	−.13+	−.09	−.07
Immigrant	.14*	.15*	.11	.11+	.03	.03	−.14*	−.15*	−.06	−.06
Family-of-origin SES	−.17**	−.13*	−.13+	−.09	.19**	.17**	.16*	.13+	.08	.06
LGBT victimization		.27***		.27***		−.19**		−.19**		−.16*

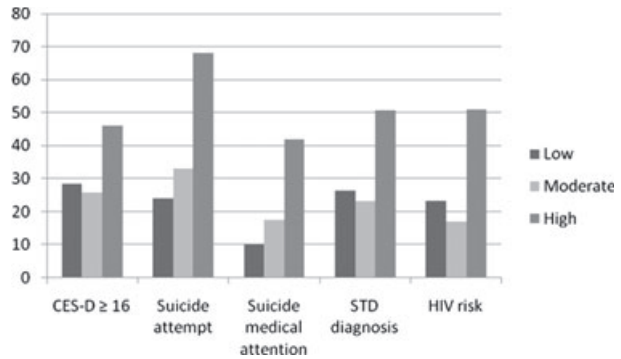
SES, socioeconomic status; LGBT, lesbian, gay, bisexual, and transgender.
+p < .10; *p < .05; **p < .01; ***p < .001.

Table 2. **Odds Ratios of Young Adult Risk Levels Predicted by Teenage Victimization (All Effects Are Adjusted for Gender, Sexual Orientation, Ethnicity, Immigrant Status, and SES)**

Outcome	Moderate Victimization, OR (95% CI)	High Victimization, OR (95% CI)	Overall Effect (χ^2)
Mental health			
Depression (CES-D $\geq$ 16)	1.12 (0.57-2.19)	2.60 (1.29-5.25)**	28.62***
Suicide attempt (ever)	1.74 (0.84-3.59)	5.62 (2.65-11.94)***	50.79***
Suicide—medical attention (ever)	2.17 (0.83-5.64)	5.60 (2.26-13.87)***	33.82***
Substance use/abuse			
Heavy drinking (last 6 months)	1.01 (0.52-1.98)	0.70 (0.34-1.42)	19.16*
Substance use/abuse-related problems (ever)	0.93 (0.49-1.78)	1.54 (0.77-3.09)	16.85*
Sexual risk behavior			
STD diagnosis (ever)	1.01 (0.45-2.27)	2.53 (1.17-5.47)*	22.71**
Reported HIV risk (last 6 months)	0.61 (0.27-1.37)	2.28 (1.09-4.76)*	34.91***

SES, socioeconomic status; CES-D, Center for Epidemiologic Studies-Depression[20,21]; STD, sexually transmitted disease.
$^{+}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

Figure 1. **Percentage of Health Risks by Level of LGBT-Related School Victimization (Low, Moderate, and High)**



California middle school student Lawrence King was murdered in his classroom in February 2008, there was significant public attention to the ongoing and persistent victimization of LGBT students (and those who are perceived to be LGBT) at school.[25] More recently, there has been widespread attention to the number of suicides that are closely linked to anti-LGBT school victimization.

Although the immediate outcomes are not usually so extreme, for many LGBT and gender nonconforming adolescents, the simple, daily routine of going to school is fraught with harassment and victimization. Population-based studies have consistently shown that students who identify or are perceived to be LGB are at dramatically higher risk for a wide range of health and mental health concerns, including sexual health risk, substance abuse, and suicide, compared with their heterosexual peers. Although the long-term impact has been reported anecdotally, ours is the first-known study to document the strong negative effects of victimization at school during adolescence on multiple dimensions of young adult well-being.

A notable finding in our study is that LGBT school victimization mediates the strong link between gender and negative mental health—depression and suicidal ideation. Our results show that males' elevated depression and suicidal ideation scores can be explained once their disproportionate rates of victimization are taken into account. These findings are consistent with prior studies that highlight the link between homophobia and masculinity in the lives of adolescent boys.[1,2,8] The stakes of gender conformity are especially high for boys; undoubtedly, much of the LGBT school victimization that they experience is also rooted in a peer culture that demands conformity to masculine gender. In fact, other studies show that adolescent gender nonconformity is a source of significant risk in the lives of young people, particularly for boys and for LGB youth[26,27] and gender nonconforming LGBT youth.[28] Further research on the link between overall health and gender nonconformity at school is warranted.

Limitations

These novel results must be interpreted in the context of several limitations of the study. It is retrospective, and relies on LGBT young adults' recollections of experiences during their teenage years. To minimize recall bias, we used measures that asked specific questions about school victimization. Although the sample was drawn to study LGBT young adults from a wide range of sites, this is a hidden group and the sample is not representative of the population. The study focused on LGBT Latino and non-Latino White young adults—the 2 largest ethnic groups in California. Subsequent research should include greater ethnic diversity to assess potential differences related to ethnicity within these groups.

IMPLICATIONS FOR SCHOOL HEALTH

Our results suggest that even modest reductions in LGBT school victimization for those who experience

it most in middle and high school would result in significant long-term health gains. Reducing the dramatic disparities for LGBT youth who are the most victimized student group should be an educational and public health priority, and can play an important role in helping mitigate the well-documented adult health disparities that exist for LGBT adults in the United States.[29] As public health policies increasingly focus on social determinants of health and on developing structural interventions to address significant disparities, schools—which are the primary socializing institution where children and adolescents spend most of their time—provide a critical environment for intervention. Our findings of dramatically elevated levels of suicide attempts, risk for HIV infection, STD diagnoses, and depression provide a clear public health rationale for implementing safe school programs to prevent bias-related and anti-LGBT bullying. Awareness of this compelling relationship is especially important for school health programs that are funded by HIV funding streams. School climate clearly matters, and enumerating bias related to LGBT identity in school policies will help administrators to ensure that prevention funds are used effectively at both structural and individual levels.

Other research has documented the effectiveness of specific school policies and programs for promoting safe school climates for all students, both LGBT and heterosexual. Specifically, this work shows that schools have safer LGBT school climates when (1) they have and enforce clear and inclusive antidiscrimination and antiharassment policies that include LGBT identity and gender expression, (2) students know where to go for information and support about LGBT concerns, (3) school staff regularly intervene when bias-motivated harassment happens, (4) students have gay-straight alliances and other student-sponsored diversity clubs, and (5) LGBT issues are integrated into the curriculum.[8,26,27,30-32] In spite of such evidence, a recent national survey revealed that the politics of sexual orientation too often get in the way of the implementation of such policies and programs in US schools.[33] School administrators and educators must continue to advocate for and to implement LGBT inclusive policies and programs to promote safe and supportive learning environments where all students are protected from bias-motivated victimization and harassment and are free to learn and flourish in schools. For too many LGBT and gender variant students, school victimization has resulted in school failure, poorer grades, and restricted life chances that limit vocational and career development and undermine their human potential.

Human Subjects Approval Statement

San Francisco State University's institutional review board approved the study design and protocol.

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